MISHCHENKO, P.I.

Effect of Rauwolfia alkaloids on renal hemodynamics in hypertension.
Terap. arkh. 32 no. 5:7-12 My '60. (MIRA 14:1
(RAUWOLFIA) (KIDNEYS—BLOOD SUPPLY)

MISHCHENKO, P.I., dotsent

Effect of reserpine on the renal blood flow and the glomerular filtration ar. reabsorption in hypertonic disease. Nauch.trudy Chetv.Mosk.gor.klin.bol'. no.1:347-355 '61. (MIRA 16:2)

1. Iz kafedry propedevtiki vnutrennikh bolezney pediatricheskogo fakul'teta (zav. - prof. A.M. Damir) 2-go Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i Moskovskoy gorodskoy klinicheskoy bol'nitsy No.4 (glavnyy vrach - G.F. Papko).
(RESPERINE) (HYPERTENSION)

MISHCHENKO, P.I.

Reserpine (serpasil) in the clinical management of internal diseases. Sov.med. 25 no.4:119-128 Ap '61. (MIRA 14:6)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof. A.M. Damir) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(RESERPINE)

MISHCHENKO, P. I.

Influence of reserpine (serpasil) on kidney function in malignant hypertension. Terap. arkh. 33 no.5:19-23 My '61. (MIRA 14:12)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof. A. M. Damir) II Moskovskogo meditsinskogo instituta imeni N. I. Pirogova.

(RESERPINE) (KIDNEYS) (HYPERTENSION)

MISHCHENKO, P.I.

Effect of Rauwolfia alkaloids on the kidneys in hypertension.
Kardiologiia 2 no.4:80-82 Jl-Ag '62. (MIRA 15:9)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof. A.M.Damir) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(KIDNEYS) (RAUWOLFIA) (HYPERTENSION)

MISHCHENKO, P.P.

Repairing track on the line. Put' i put. khoz. no.10:31 O '57.
(MLRA 10:11)

1. Starshiy dorozhnyy master, stantsiya Osnova, Yuzhnoy dorogi.
(Railroads--Maintenance and repair)

TARASOV, A.M., inzh.; MISHCHENKO, P.P., inzh.

Consumption factor of the intake systems of motors. Energomashinostroenie 6 no.2:15-17 F '60. (MIRA 13:5)
(Gas and oil engines)

S/262/62/000/022/004/007
E194/E135

AUTHOR: Pishchenko, I.I.

TITLE: A comparison between various methods of gas turbine supercharging

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, Silovyye ustanovki, no.22, 1962, 42, abstract 22.22.272. (Tr. Khar'kovsk. politekhn. in-t, Khar'kovsk. z.-d transp. mashinostr., v.32, 1961, 49-67)

TEXT: General considerations are presented concerning the use of turbines with constant and variable pressure before the nozzles and a procedure of calculation is given for two systems. 1) The exhaust gases are directed to a common receiver, the volume of which is large compared with that of the cylinder (constant gas pressure). 2) The exhaust manifolds are made as short as possible, of small cross-section and serve 2-3 cylinders. Gas is delivered from individual groups of cylinders to the corresponding sections of the turbine nozzle gear (variable gas pressure).

[Abstractor's note: Complete translation.]

Card 1/1

S/145/62/000/0.1/...5/0..

[illegible]

Two methods of supercharging are discussed: [illegible] the engine exhaust. The two methods [illegible] specific [illegible] in terms of the effective efficiency [illegible] the effective work. [illegible] fuel consumption and the effective work. [illegible] and the exhaust system, [illegible] uniform in the whole cylinder and the exhaust system, [illegible] with time. For cases with variable pressure at the turbine [illegible] the differential equations for volumentric balance, by [illegible] Rabochiye protsessy dvigateley vnutrennego [illegible] Operating Processes of Internal Combustion Engines, Mashgiz, [illegible]

Card 1/2

Investigating the [illegible]

are applied. It is [illegible] formula:

$$\eta_p = \frac{[illegible]}{[illegible]}$$

[illegible] Junky (Dir. Aerodynamic Lab. [illegible]
tantsiya, Brown Bovari Mitteilungen, [illegible], no. [illegible]
to determine approximately which system is [illegible]
[illegible] the following relations for η_p [illegible], the system with [illegible]
is preferable; for η_p [illegible] - the system with [illegible]

In results of the experimental investigations by the [illegible]
the Zhukovskiy Aviation Institute on the design of the [illegible]
[illegible], the [illegible] formula is [illegible]
[illegible] results. [illegible] this [illegible]
[illegible] able to determine the [illegible]
[illegible] ethods of gas turbine [illegible]
analysis of other [illegible]
[illegible] Zhukovskiy Aviation Institute, [illegible]
na (Kharkiv Polytechnic Institute [illegible]

Card 2/2

MISHCHENKO, S.A.

Flexible feed pipe for diesel-powered hammers. Rats.i izobr.predl. v stroi. no.58:28-29 '53. (MLRA 7:2)
(Pile driving)

BURLACHENKO, M.A., kand. med. nauk; [illegible], L.D.; KAUSHANSKIY, M.[illegible]; PELTIN, K.K.; KHAVETS, I.G.; [illegible], [illegible] Kishinev; MIL'SHTEYN, [illegible].V. Bel'tsy; [illegible] Bendery; [illegible]; MOYTIKH, R.M. Tiraspol'; VARSHAVAN, [illegible]. Soroki

Role of artificial pneumothorax in the compound treatment of pulmonary tuberculosis. Probl. tub. no. 4:49-[illegible]

1. Iz Moldavskogo instituta tuberkuleza direktor - zasl. deyat. nauk M.A. Burlachenko.

ACC NR: [illegible] SOURCE CODE: UR/0075/66/021/011/1392/1394

AUTHOR: Kononenko, L. I.; [illegible], S. A., Poluektov, N. S.

ORG: Institute of General and Inorganic Chemistry, UkrSSR Academy of Sciences, Laboratories (Institut obshchey i neorganicheskoy khimii AN USSR, Laboratorii) in Odessa

TITLE: Investigation of the fluorescent reaction for terbium with phenyl salicylate

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 11, 1966, 1392-1394

TOPIC TAGS: terbium, rare earth element, [illegible] analysis, [illegible], salol, phenyl salicylate, reagent

ABSTRACT: A method for fluorimetric determination of terbium [illegible] salicylate has been introduced. The method was applied to the [illegible] centrates of rare earth elements of the yttrium subgroup. [illegible] tested on a number of samples of rare earth [illegible]. The [illegible] is ± 4.5%. As a reagent for terbium phenyl salicylate (salol) [illegible]

UDC: 543.7

Card 1/2

ACC NR: AP7005539

other reagents with respect to luminescence [illegible] weighted [illegible] compound with salol and the EP-5 type [illegible] 1 table, and 1 formula. [Based on authors' abstr[illegible]

SUB CODE: 07, 20/SUBM DATE: 29Oct65/ORIG REF: 003

Card 2/2

LAPPO, D.D. (Leningrad); [illegible], S.S. (Leningrad)

Calculating the stability of [illegible] of bodies of water. Stroi. truboprov. [illegible]

AID P - 5411

Subject : USSR/Engineering

Card 1/2 Pub. 11 - 1/13

Authors : Gurevich, S. M., and S. V. Mishchenko

Title : Automatic electric arc welding of titanium

Periodical : Avtom. svar., 5, 1-12, My 1956

Abstract : The authors discuss the most important properties of commercial titanium affecting its welding. They describe titanium welding in inert gas atmosphere by non-melting electrode, and the automatic titanium welding with specially developed flux available from the Electrowelding Institute im. Paton. Some data on the structure and mechanical properties of welded specimens are given. Five tables, 8 micro-pictures, 2 graphs; 10 foreign-references (1948-56) and 5 Russian references (1952-56).

Avtom. svar., 5, 1-[illegible], My 1[illegible]

AID P - [illegible]

Card 2/2 Pub. 11 - 1/13

Institution : As above

Submitted : 26 Je 1[illegible]

KROLEVETS, K.M.; MISHCHENKO, S.V.; KALMYKOVA, V.P.; MAL'TSEVA, N.D.

Photorelay equipped with a germanium phototriode. Avtom.i prib. no.1:59-62 Ja-Mr '62. (MIRA 15:3)

1. Institut avtomatiki Gosplana USSR.
(Electric relays)

KROLEVETS, K.M.; MISHCHENKO, S.V.

Indicator of metal position in heat treating furnaces. Avt. i prib. no.4:49-51 O-D '64 (MIRA 18:2)

KROLEVETS, K.M.; MISHCHENKO, S.V.

Photorelay for indicating the position of metal in the stand of a blooming mill. Avtom. i prib. no.2:45-47 Ap-Je '65. (MIRA 18:7)

L 20355-65 EWT(l)/EWT(m)/EPF(n)-2/EPR/T-2/EWP(t)/EPA(bb)-2/EWP(b) Ps-4 IJP(c)/
AEDC(a)/ASD(a)-5/AFETR/ESD(gs)/ESD(t) JD

ACCESSION NR: AP4049079 S/0136/64/000/011/0090/0092

AUTHOR: Rogozinskiy, A.A.; Makarov, G.S.; Mishchenko, V.D.; Tarary*shkin, V.I.

TITLE: Use of an electromagnetic pump in the preparatory casting of magnesium alloys

SOURCE: Tsvetny*ye metally*, no. 11, 1964, 90-92

TOPIC TAGS: electromagnetic pump, magnesium alloy, nonmetallic impurity, flux enclosure, centrifugal pump, magnesium casting

ABSTRACT: In order to obtain magnesium alloy ingots with fewer impurities, mechanical action on the melt and its uptake of oxygen from the air have to be avoided. This may be accomplished by moving the melt from the mixer tank to the mold by electromagnetic means, thus providing a closed transit to the mold without mechanical disturbance of the melt. In the present paper, a laboratory apparatus is illustrated and described (see Fig. 1 of the Enclosure) for moving such melts by either centrifugal or electromagnetic means, making possible comparison of the results in the templets; with the latter method, these showed greatly increased purity of the metal (e.g. 0.04 as against 2.13% impurities) and only one case of non-metallic inclusion in 54 templets, compared to 5 in 37 templets using a centrifugal pump. Flux inclusions were rarely seen. Besides, the new method avoids

Card 1/2

L 20355-65
ACCESSION NR: AP4049079

the vibratory noise, thus improving working conditions. Constancy of the level of the metal in the crystallizer was easily maintained. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 01 SUB CODE: MM, EM

NO REF SOV: 002 OTHER: 000

Card 2/3

Modifying cast iron by melting. S. Golomazov and V. Mishchenko. Liteinoe Proizvodstvo 1953, No. 2. The strength and ductility of gray iron are increased by mixing 30–40% gray iron as taken from a cupola with white iron obtained by blowing the same iron in a converter.

MISHCHENKO, V.I.

Contour trimming of cast parts in dies. Sel'khozmashina no.12: 29-30 D '55. (MLRA 9:3)

(Dies (Metalworking))

MISCHENKO, V.I.; STRBKOV, K.G.

Efficient workers increase labor productivity. Sel'khozmashina no.3:29-30 Mr '56. (MIRA 9:7)
(Agricultural machinery industry)

MISHCHENKO, V.I.

One-sided double-point welding. Sel'khozmashina no.5:30-31 My '56.
(MLRA 9:8)

(Electric welding)

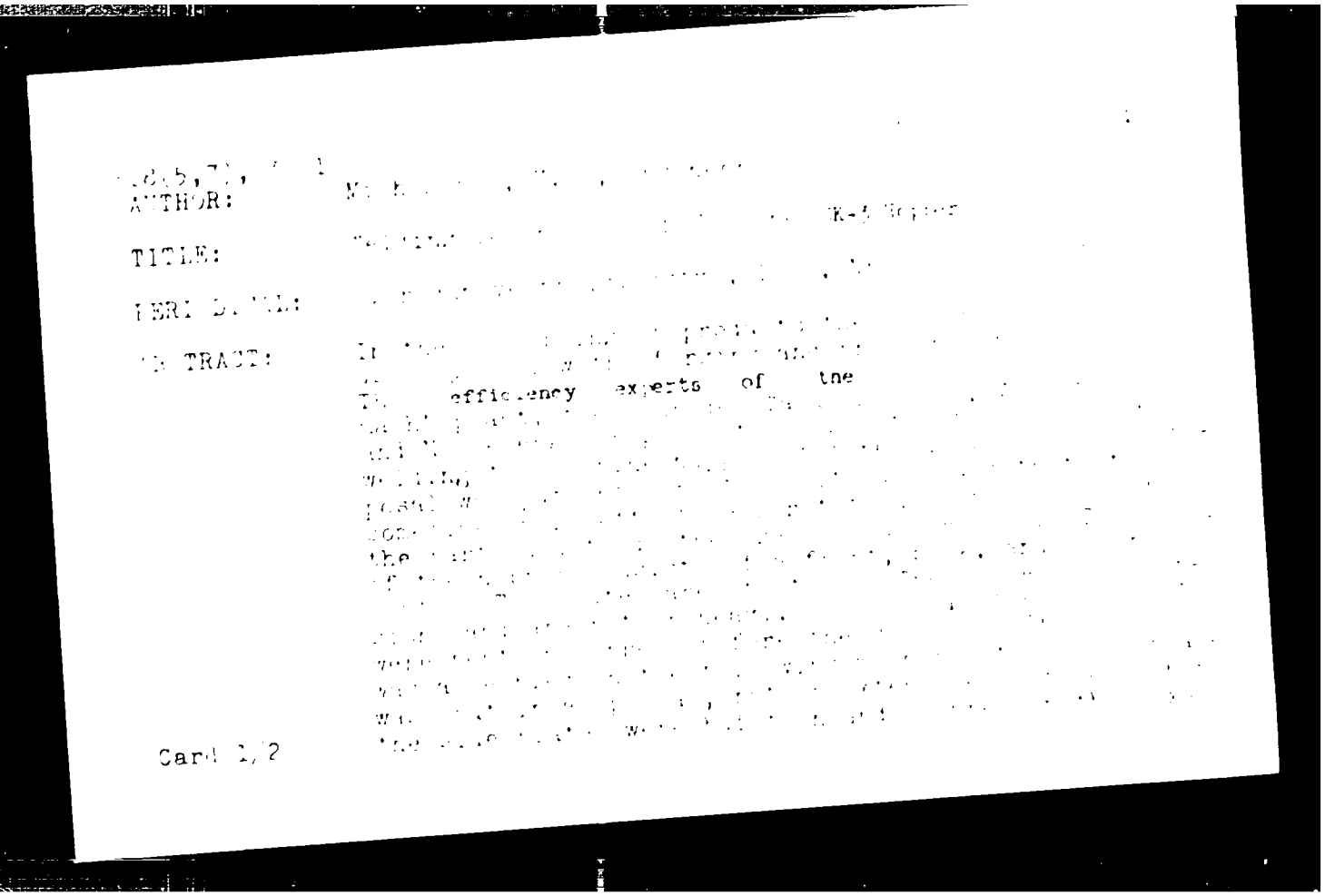
MISHCHENKO, V.I.

Ways of economizing lumber. Sel'khozmashina no.6:31-32 Je '56.
(MLRA 9:8)
(Lumber)

MISHCHENKO, V.I.

Experience in planning on lower levels. Izobr. v SSSR 2 no.4:28-31 Ap '57. (MLRA 10:6)

(Industrial management)



AUTHOR:

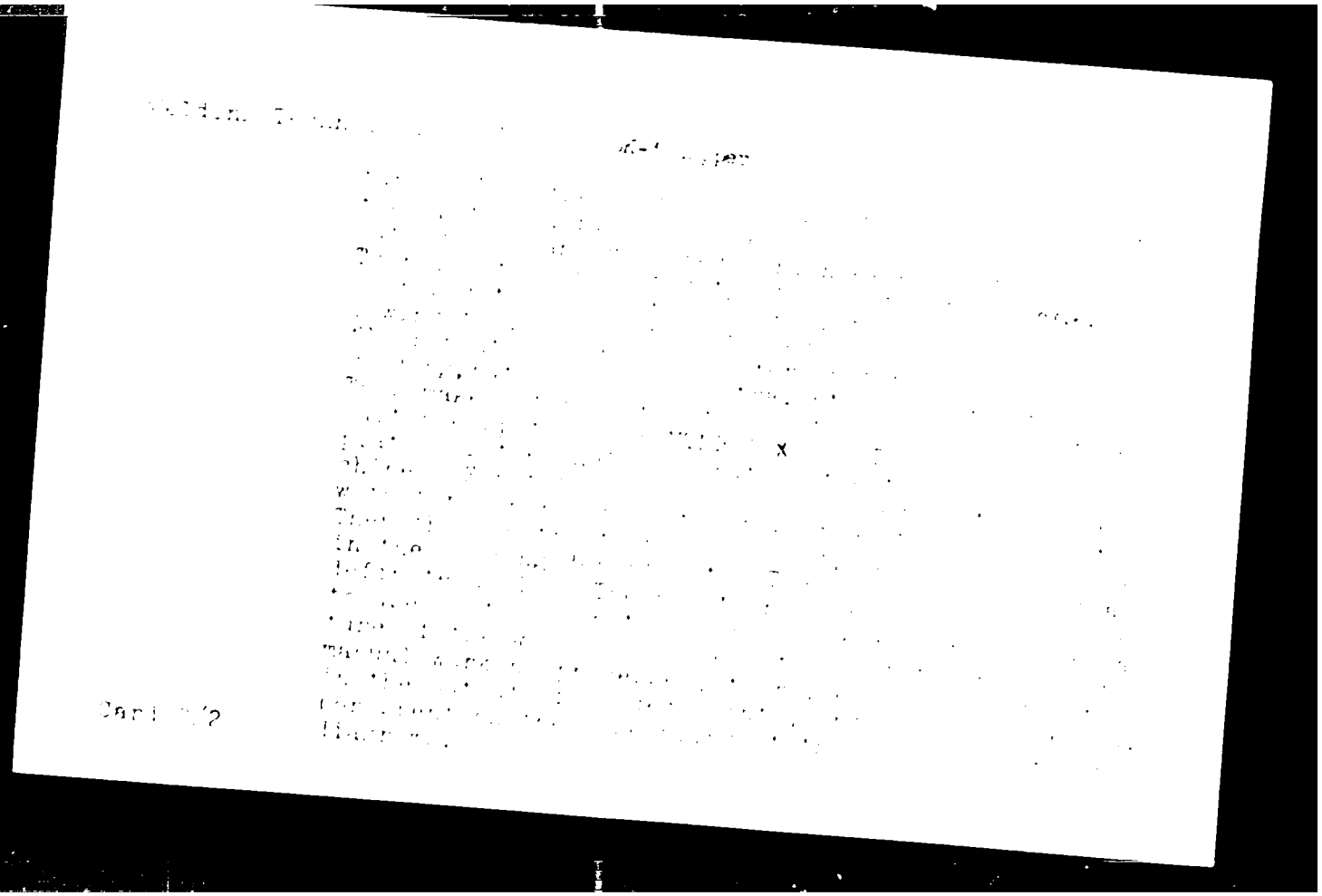
TITLE:

SERIAL TITLE:

ABSTRACT:

efficiency experts of the

Card 1/2



MISHCHENKO, V.I., inzh.

Commercial shape coiling machine. Stal' 20 no.10:933-934 O '60.
(MIRA 13:9)

1. Krivorozhskaya brigada Ukrgipromeza.
(Rolling mills--Equipment and supplies)

STREBKOV, K.G., inzhener; MISHCHENKO, V.I., inzhener.

Experience in organizing competitions and contests. Izobr. v SSSR 2 no.1:37-38 '57. (MIRA 10:4)
(Efficiency, Industrial)

MISHCHENKO, V.I., inzh.; KHOMYAK, B.S., inzh.

New methods in making nipples for the SK-[illegible] self-[illegible] combine. Trakt.i sel'khozmash. no.8:[illegible] Ag '[illegible]. (MIRA 1:11)

(Combines(Agricultural machinery))

MISHCHENKO, V.I.; KOVALENKO, Ye.V.

Calculations for determining the need [illegible].
Trakt.i sel'khozmash. no.8:47-48 Ag '54. (MLRA 1:11)
(Agricultural machinery industry)

MISHCHENKO, V.I.

Utilization of untapped potentials within the plant. Trakt. i sel'khozmash. no.12:39-40 D '59. (MIRA 13:3)

1.Rostsel'mash.
(Agricultural machinery industry)

BARANOV, Ivan Ivanovich; LAPSHIN, Georgiy Semenovich; NISHCHENKO, Vladimir Il'ich; MAKARCVA, E.A., red.; ANDREYEVA, L.S., tekhn. red.

[How to organize work with efficiency promoters in an enterprise] Kak organizovat' rabotu s ratsionalizatorami na predpriiatii. Moskva, Profizdat, 1960. 62 p. (MIRA 13:8)
(Rostov—Agricultural machinery industry—Technological innovations)

(Suggestion system)

MISHCHENKO, Vladimir Ilich, MAKAru ... A. red. ZAYTSEVA, L. A. [redacted] red.

{Planning efficiency promotion work in enterprises' Planirovanie ratsionalizatorskoi raboty na predpriiatiiakh. Moskva, Profizdat, 196? [illegible] p (MIRA 15:4)
{Technological innovations. Suggestion systems}

MISHCHENKO, V.

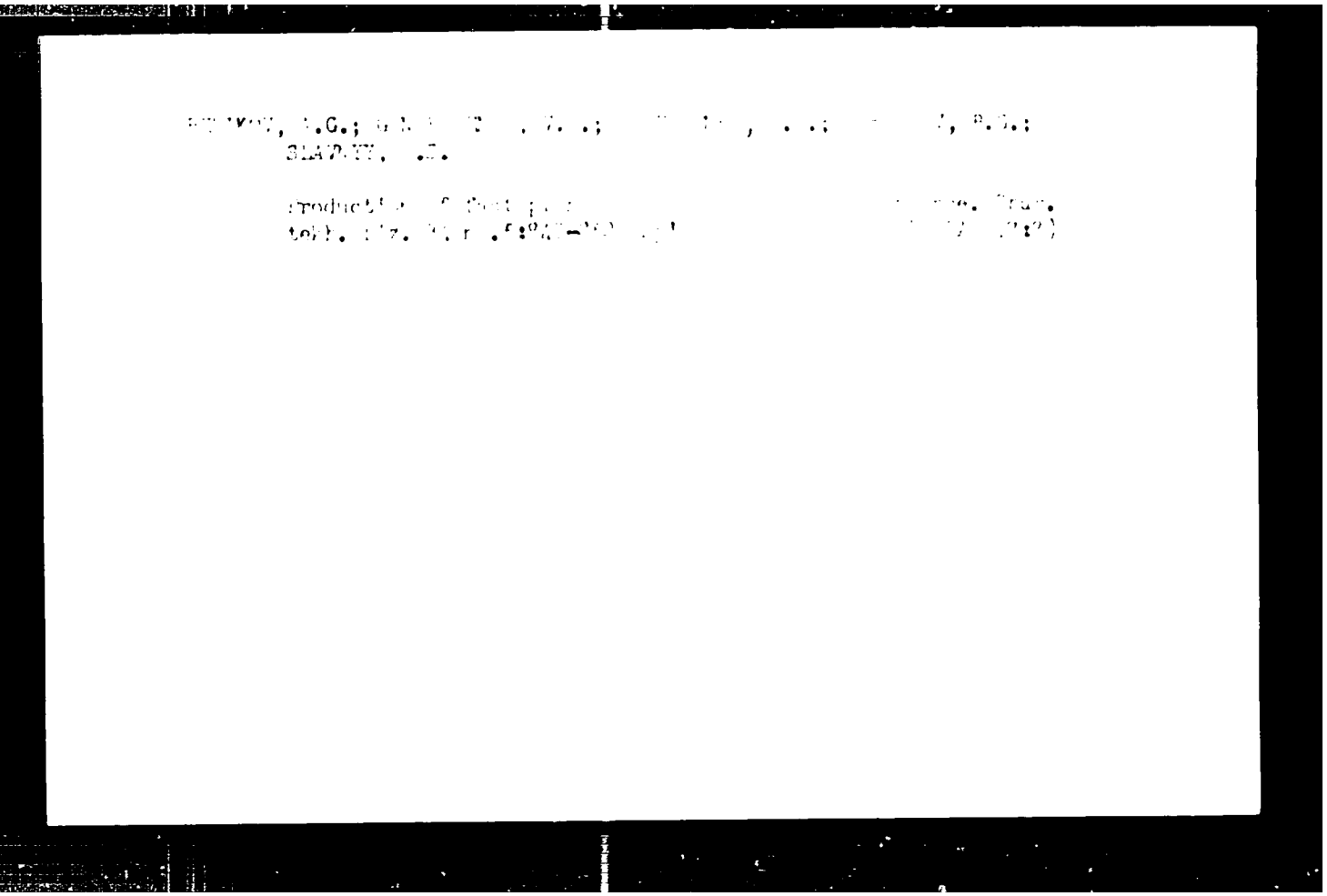
A trade-union group on a farm. Sov. profsoiuzy 19 no.17:
25-26 S '63. (MIRA 16:11)

1. Organizator professional'noy gruppy zhivotnovodcheskoy fermy sovkhoza imeni Kirova, Zaporozhskaya obl.

MISHCHENKO, V.I.

Achievements of the drillers of Bashkiria. Burenie no.3:3-6 '64.
(MIRA 18:5)

1. Gosudarstvennyy komitet neftedobyvayushchey promyshlennosti.



ACCESSION NR: AT4036068 S/2781/63/000/003/0255/0261

AUTHORS: Belikov, A. G.; Goncharenko, V. P.; Mishchenko, V. M.; Safronov, B. G.; Slavny*y, A. S.

TITLE: Investigation of coaxial plasma accelerator

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i problemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis); doklady* konferentsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 255-261

TOPIC TAGS: plasmoid, plasmoid acceleration, plasma source, high temperature plasma, plasma density, discharge plasma

ABSTRACT: A coaxial electrodynamic plasma accelerator is investigated in order to determine some of its parameters, namely the plasmoid velocity, the plasmoid density, the contamination of the plas-

Card 1/4

ACCESSION NR: AT4036068

ma with heavy ions, and the energy distribution of the ions. The electrodynamic plasma accelerator consists of two coaxial cylinders (72 and 32 mm inside diameter, length of accelerating electrodes 175 mm). The pressure used was (1--3) x 10^{-3} m/m^2, and the working volume was filled with gas using a pulsed valve described by J. Marshall (Fizika goryachey plazmy* i termoyaderny*ye reaktsii, Atomizdat, M. 1959, p. 290). The acceleration of the plasma by the coaxial accelerator was investigated as a function of the delay between the start of the entry of the gas into the working volume (more accurately, the start of operation of the hammer of the valve) and the discharge of the source. The discharge was investigated with an internal magnetic probe. The plasmoid velocity was measured with optical (photomultiplier) and external magnetic probes. The mass composition and the energy of the ions of the plasmoids were determined by the Thomson parabola method. The results have shown that two plasmoids, moving with different velocities, are produced during the acceleration of a plasma with a coaxial electrodynamic

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ACCESSION NR: AT4036068

source. The formation of the plasmoids is not connected with the periodicity of the discharge in the source. Further research is necessary to ascertain the nature of the first plasmoid. The charged-particle density exceeds 10^{13} cm^{-3}, the hydrogen ion energy in the fast plasmoid reaches 4--5 keV, and the plasmoid impurities are high, 50--60% in the slow plasmoid and less in the fast one. Exact determination of the impurity contents in the fast plasmoid is difficult. Orig. art. has: 10 figures.

ASSOCIATION: None

SUBMITTED: 00	DATE ACQ: 21May64	ENCL: 01
SUB CODE: ME	NR REF SOV: 002	OTHER: 003

Card 3/4

ACCESSION NR: AT4036068

ENCLOSURE: 01

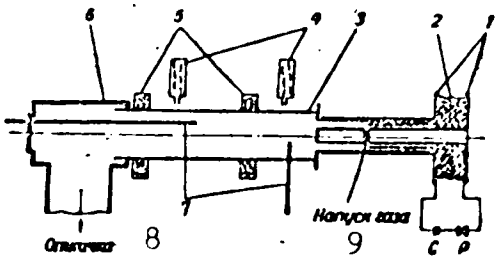


Diagram of accelerator: 1 - source electrodes, 2 - insulator, 3 - glass tube, 4 - photomultiplier, 5 - external magnetic probe, 6 - vacuum chamber, 7 - internal magnetic probe, 8 - vacuum, 9 - gas inlet

Card 4/4

ACCESSION NR: AP4035694 S/0057/64/034/005/0847/0852

AUTHOR: Belikov, A.G.; Goncharenko, V.P.; Mishchenko, V.M.; Safronov, B.G.; Slavnyy, A.S.

TITLE: Production of fast plasma bursts with a coaxial plasma gun

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.5, 1964, 847-852

TOPIC TAGS: plasma, plasma gun, coaxial gun, plasma burst, fast ion

ABSTRACT: This paper reports a continuation of previous work by the same five authors (Sb."Fizika plasmy* i problemy* upravlyayemogo termoyadernogo sinteza",No.3, Izd.AN USSR,Kiev,1964). The velocity, density and other properties of deuterium plasma bursts obtained with a coaxial cylindrical plasma gun were determined as functions of the discharge voltage and the time delay between admission of the gas and initiation of the discharge. Plasma bursts were obtained which contained more than 10^{17} particles and had densities greater than 10^{13} cm^{-3} and velocities greater than 8 to 9 x 10^7 cm/sec. The plasma gun consisted of two coaxial cylinders 32 mm and 72 mm in diameter and 17.5 cm long. One cubic centimeter (standard conditions) of deuterium was admitted to the annular space through openings in the wall of the in-

ACCESSION NR: AP4035694

ner cylinder. Gas began to enter the interelectrode space 170 microsec after the valve was triggered, and the valve remained open for 80 microsec. A 27-microfarad capacitor charged to 20 kV or less was discharged through the gun. The resulting plasma burst was observed in a 95-mm glass drift tube. No confining axial magnetic field was used. The plasma bursts were analyzed with a Thomson mass spectrometer located 2.5 meters from the source. The velocity of the bursts was determined from the flight time between two external magnetic probes located 50 cm and 200 cm from the gun. The density was monitored by observing the cut-off of 8-mm microwaves at 80 cm from the source. In some cases the total energy of the plasma was estimated from calorimetric measurements. The ions in the plasma bursts were distributed over a wide range of energies. The velocity of the burst as determined from the flight time between the two magnetic probes agreed with that calculated from the ion energies as measured with the mass spectrometer. The highest velocities were achieved with a delay (between triggering the gun and applying the potential) of 200 to 250 microsec. When the delay was less than 170 microsec, gas did not enter the interelectrode space until after the potential had been applied. Under these conditions only slow bursts were formed. Normally there were two bursts per shot, and these had widely different velocities. When the delay was increased beyond about 250

Card 2/3

ACCESSION NR: AP4035694

microsec, the slow burst grew in size at the expense of the fast one, and the two bursts tended to merge. Orig.art.has: 2 formulas, 9 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 11May63 DATE ACQ: 20May64 ENCL: 00

SUB CODE: ME, NP NR REF SOV: 001 OTHER: 002

3/3

Card

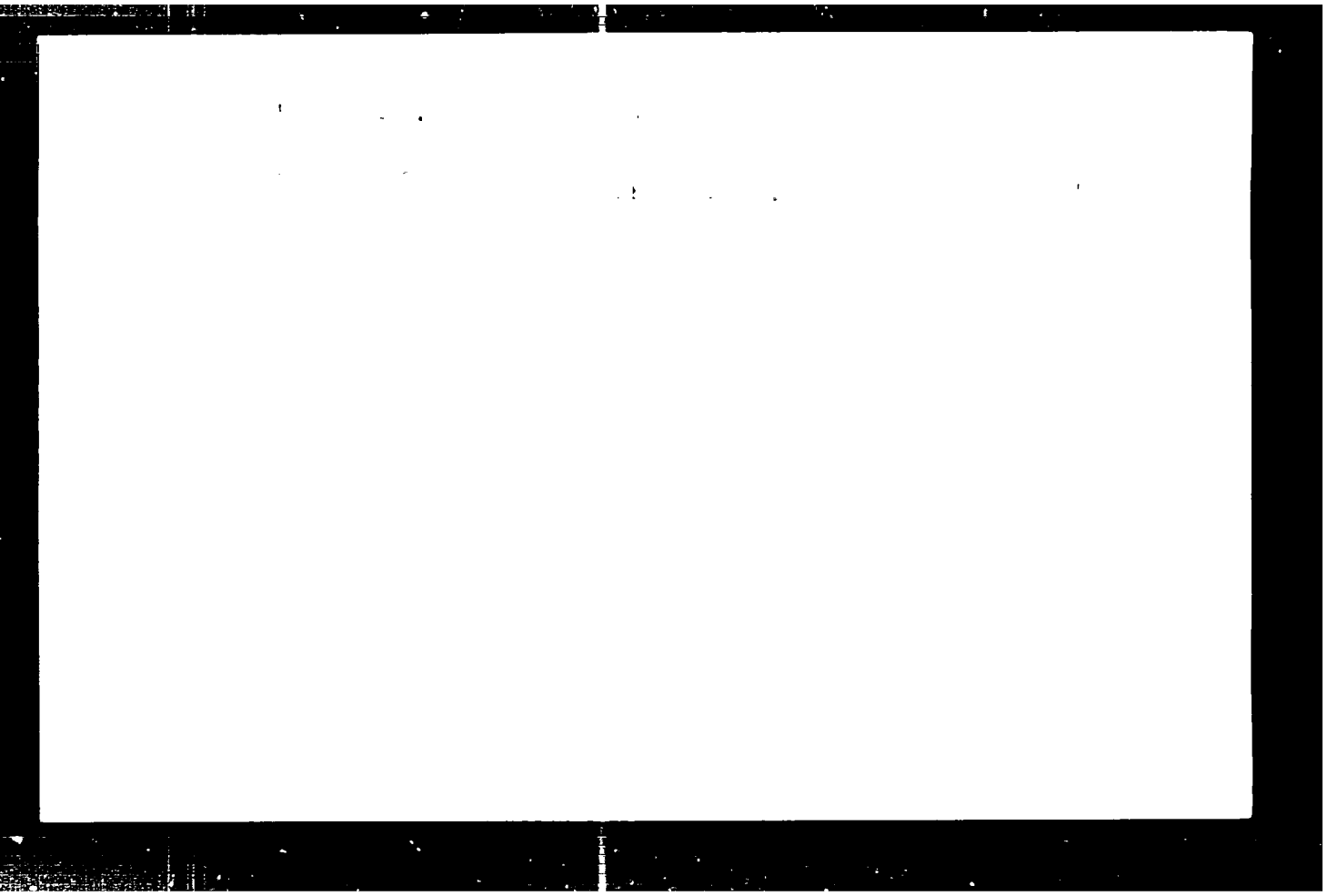
ALEKSAPOL'SKIY, D.Ya., kand.tekhn.nauk; GALYNKINA, L.D., inzh.; MAKARCHUK, V.N., inzh.; MISHCHENKO, V.M., inzh.

Backing run torque converter for marine reverse gear. Sudostroenie 29 no.7:23-27 Jl '63. (MIRA 16:9)

(Marine engineering)

MAKARCHUK, V.N.; MISHCHENKO, V.M.

Experimental investigation of flow structure before the pump wheel of a hydraulic torque converter. Sbor.trud.Lab.gidr.mash.AN URSR no.10:146-152 '62. (MIRA 15:12)
(Oil-hydraulic machinery) (Hydrodynamics)



L 8755-65 EEO-2/EWT(d)/FSS-2/EWT(1)/EPA(b)/EEC(k)-2/EWG(v)/EED-2/FCS(k)/FS(b)
EWA(1) Pd-4/Pe-5/Pg-4/Pk-4/PL-4/Pn-4/Po-4/Pq-4 IJP(c) BC
ACCESSION NR: AT4041817 S/2563/64/000/230/0124/0131

AUTHOR: Bushmarin, O.N.; Mishchenko, V.M. B

TITLE: Study of the conical guidance system of a horizontal hydroturbine model

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy*, no. 230, 1964. Tekhnicheskaya gidromekhanika (Technical hydromechanics), 124-131

TOPIC TAGS: hydromechanics, hydroturbine, hydraulic turbine, turbine guidance system, hydroturbine model, horizontal hydroturbine, conical guidance device

ABSTRACT: In 1962, a study was made of the flow-through section of a model of a horizontal rotating-blade hydraulic turbine with a bulb located in front of the guidance apparatus. The study had the following specific purpose: to design, manufacture and test a conical guidance mechanism which would create a potential flow in the section immediately ahead of the turbine model rotor; that is, a flow with twisting according to the law $V_u r = \text{const}$, $V_z = \text{const}$ over the entire section. At the same time, it was essential that the requirement calling for complete blocking of the guidance apparatus at zero opening be fulfilled. In the present article, the authors report an experimental investigation of guidance apparatus having blades of various configurations, and give a velocity direction calculation for the section following these guidance devices. Four different blade con-

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L 6755-65
ACCESSION NR: AT4041817

0

figurations for the guidance mechanisms were studied. The fundamental differences in the four mechanisms were in the peripheral form of the blades, while their internal section (abutting on the turbine bushing) remained relatively unchanged. The conditions under which the velocity and pressure fields were measured in front of the working rotor are described in detail. The radii over which the measurements were made were selected at characteristic sites because of the disruption of the axial symmetry of the flow in the turbine by the columns supporting the bulb. The formulas used in the computation of the parameters of interest (velocity vector, pressure, etc.) are explained in the text. The velocity and pressure fields beyond the guidance apparatus were measured in the absence of the turbine model rotor; more accurately, with the blades of the rotor removed, but with the rate through the turbine kept equal to the rate with the rotor present. Experiments with lubricated slots are discussed and, on the basis of an examination of graphs for V_{z1} and V_{u1} with and without slots, the conclusion is reached that the effect of the latter on the values of these velocities is felt at a distance of not more than 25 mm from the bushing; that is, 14% of the test radius. Projection curves of dimensionless velocities are given for specific operating modes of the turbine model. It is demonstrated that guidance mechanism No. 4 (see Figure 1 of the Enclosure) creates a flow before the rotor which approximates the potential flow. A comparison of graphs of reduced full pressure

Card 2/4

L 8755-65

ACCESSION NR: AT4041617

heads obtained in the section before the rotor revealed that an important advantage of the No. 4 apparatus, in comparison with the No. 1, is the reduction of energy losses. The authors also considered the problem of the calculation of the velocity direction behind the conical guidance mechanism. They note that the design of a guidance mechanism which will create a flow of given form in front of the working turbine rotor requires the solution of an inverse spatial problem, with the blade configuration found on the basis of a given flow before and after the guidance mechanism and also on the basis of several selected geometrical parameters of the array. Noting the extreme difficulties encountered in the use of this method, even in a simplified formulation, the authors attempted, in this instance, to apply to the calculation of a conical guidance mechanism the flow determination method normally used in the computation of in-line arrays. Orig. art. has: 7 figures and 8 formulas.

ASSOCIATION: Leningradskiy politekhnicheskiy institut imeni M. I. Kalinina (Leningrad Polytechnical Institute)

SUBMITTED: 00 ENCL: 01 SUB CODE: PR, NC

NO REF SOV: 003 OTHER: 000

Card 3/4

L 8755-65

ACCESSION NR: AT4041817

ENCLOSURE: 01

Guidance device No. 1 Guidance device No. 4

Figure 2 - Schematic representation of two guidance systems.

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L 8178-66 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1)
ACC NR: AP5025570 SOURCE CODE: UR/0143/65/000/008/0076/0082

AUTHOR: Mishchenko, V. M. (Engineer)

ORG: Leningrad Polytechnic Institute imeni M. I. Kalinin (Leningradskiy politekhnicheskiy institut)

TITLE: Calculation of profile losses in turbomachinery inlet vanes

SOURCE: IVUZ. Energetika, no. 8, 1965, 76-82

TOPIC TAGS: cascade, cascade loss, profile loss, turbomachinery

ABSTRACT: An approximate method for estimating the extent of the laminar transition and turbulent regions in flow around an airfoil is suggested. This method is used to calculate the profile losses in a reversible cascade. Since the point at which the laminar layer loses its stability can be calculated (G. Schlichting, Teoriya pogranichnogo sloya, IL, M., 1956), the region between P (loss of stability) and T (onset of full turbulence) which can be characterized by

$$\Delta \mathrm{Re}_{\nu}^{**} = \mathrm{Re}_{\nu}^{**} - \mathrm{Re}_{\nu p}^{**}$$

where

$$\mathrm{Re}_{\nu}^{**} = \left(\frac{w^{**}}{\nu}\right)_{T}, \quad \mathrm{Re}_{\nu p}^{**} = \left(\frac{w^{**}}{\nu}\right)_{P}$$

Card 1/3 UDC: 532.526:621.135

L 8178-66

ACC NR: AP5025570

2

is of primary interest. A curve of $\Delta Re_{\delta_2}^{**}$ as a function of K_T

$$K_T = \frac{1}{x_T - x_p}\int_{x_p}^{x_T} \frac{U^{n+1}}{\nu}\, dx,$$

(where x = coordinate) based on various data has been obtained, as shown in Fig. 1. The dotted line represents an extrapolation of experimental data based on the author's arguments. By plotting

$$\Delta Re^{**} = Re^{**} - Re_p^{**}$$

versus

$$K = \frac{1}{x - x_p}\int_{x_p}^{x} \frac{U^{n+1}}{\nu}\, dx,$$

for the given flow, the turbulence point K_T can be determined from the intersection point with the general curve of Fig. 1. If the curves do not intersect, it can be argued that separation has occurred and that $\Delta Re_{\delta_2}^{**} \approx 400$. The profile losses were calculated for a reversible cascade with $\beta = 24°54'$, b = 1.05 and inlet conditions Re = 2.5-3.8 x 10^5 and $\approx$ 1% turbulence. The total profile losses were calculated from equations derived by L. G. Loytsyanskiy (Soprotivleniye reshetki profiley, obtekayemoy vyazkoy szhimayemoy zhidkost'yu. "Prikladnaya matematika i mekhanika," t.XI, vyp. 4, 1947). The calculated values were in excellent agreement with experimental data. The cascade experiments were conducted together with I. L. Loytsyanskaya. The paper was submitted by the Department of Hydroaerodynamics

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L 8178-66
ACC NR: AP5025570

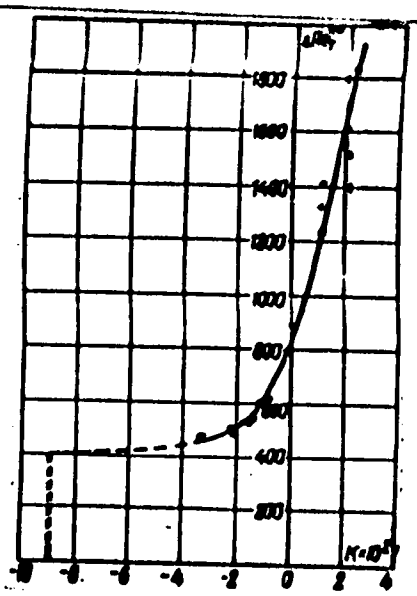

Fig. 1. ΔRe_T^{cr} versus K_T

(Kafedra gidroaerodinamiki). Orig. art. has: 5 figures and 19 formulas.

SUB CODE: PR/ SUBM DATE: 15Feb65/ ORIG REF: 003/ OTH REF: 002

Card 3/3 rev

L 63069-65 EWP(m)/EWT(1)/FCS(k)/EWA(1) Pd-1/Pi-4 WW

ACCESSION NR: AT5015713 UR/2563/65/000/248/0093/0103

AUTHOR: Mishchenko, V. M.

TITLE: Turbulent boundary layer on a lattice profile with localized flow detachment

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 248, 1965. Tekhnicheskaya gidrogazodinamika (Technical gas hydrodynamics), 93-103

TOPIC TAGS: turbulent boundary layer, flow burble, inverse effect, lattice profile, flow incidence angle, compressor lattice, burble point

ABSTRACT: The report covers a study of the turbulent boundary layer on thin, rounded, leading edge profiles of a compressor lattice. Analysis of measured and calculated velocity distributions indicates that the minimal pressure point on such profiles is situated close to the frontal critical point. The major positive pressure gradients occur downstream and usually result in a localized separation of the boundary layer. Velocity distribution near the tip of a profile is significantly affected by the boundary layer's inverse effect. The author postulates that the transition point for such flows coincides with the minimal pressure point and that minimal RE number differentials would apply at the points of transition and stability loss ($Re^{**}_{trans} \approx 450$). The resultant calculated data coincided

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L 63069-65

ACCESSIONNR: AT5015713

well with the results of experiments. The location of the boundary layer separation point can be defined by calculation. The author suggests that his approach allows a proper basis for defining the relationship between lattice profile losses and the flow's angle of incidence. Orig. art. has: 7 figures and 17 formulas.

ASSOCIATION: Leningradskiy politekhnicheskiy institut imeni M. I. Kalinia (Leningrad Polytechnic Institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: PR, ME

NO REF SOV: 005 OTHER: 002

Card 2/2

L 09244-67 EWT(d)/EWT(m)/EWP(w) IJP(c) EM/WDM/AM/GD
ACC NR: AT6031303 (N) SOURCE CODE: UR/0000/66/000/000/0068/0077

AUTHOR: Mishchenko, V. M.

ORG: Kharkov Branch of the Institute of Mechanics AN UkrSSR (Khar'kovskiy filial Instituta mekhaniki AN UkrSSR)

TITLE: Methods for calculating profile losses in turbine cascades

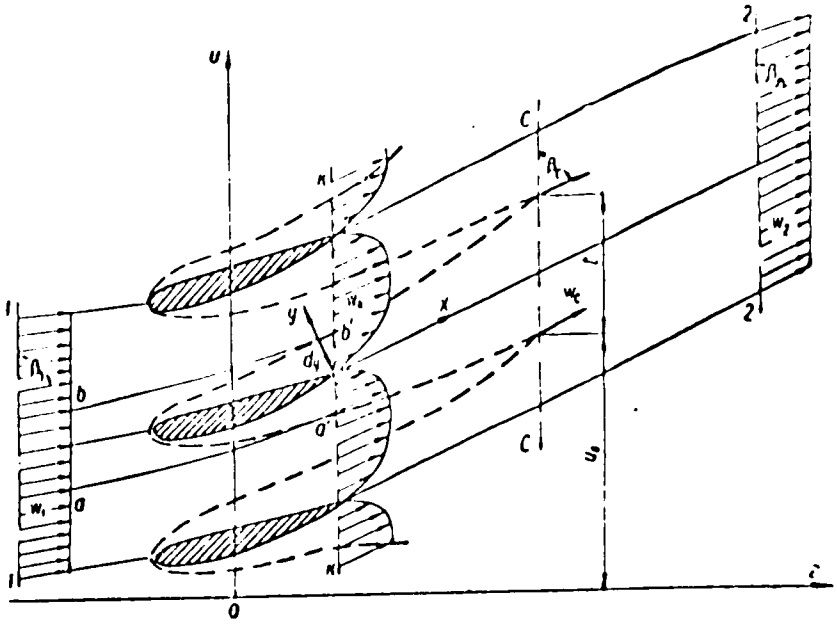
SOURCE: AN UkrSSR. Gidrodinamika gidromashin (Hydrodynamics of hydraulic machinery). Kiev, Izd-vo Naukova dumka, 1966, 68-77

TOPIC TAGS: turbine cascade, boundary layer problem, hydraulics

ABSTRACT: The author considers various existing methods for calculating profile losses in turbine cascades by computing the losses under conditions with infinitely thin trailing edges with subsequent evaluation of edge losses. The assumptions made in derivation of the formulas are singled out and the final expressions are reduced to an identical form for a comparative evaluation of the accuracy of the various methods. It is assumed in all comparisons that the actual parameters of the boundary layer are known so that the accuracy of calculating profile losses is determined only by the plotting accuracy of the given method. The methods compared are those proposed by L. G. Loytsyanskiy (PMM, 1947, 11, 4), L. Speidel (Ing.-Arch., 1954, 22, 5), G. Yu. Stepanov ("Hydrodynamics of Turbine Cascades", Fizmatgiz, Moscow, 1962) and N. M.

Card 1/3

L 09244-67
ACC NR: AT6031303



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ACC NR: AT6031303

Markov ("Calculating the Aerodynamic Characteristics of a Plane Cascade of Profiles in Axial Turbines", Mashgiz, Moscow, 1952). The results show that profile losses for both nondetached flow and for flow with localized separation may be most accurately calculated by the following formula proposed by L. G. Loytsyanskiy:

$$\Delta h_0 = \frac{Qw_2^2}{l \sin \beta_2} \sum \delta_K^{**} \left(\frac{w_K}{w_2} \right)^{\frac{1}{2}(H_K + 5)}$$

where Δh_0 represents losses under conditions with infinitely thin trailing edges, δ_K^{**} is the thickness of the boundary layer with respect to impulse loss, and the expressions under the summation sign are calculated separately for the boundary layers on the convex and concave surfaces of the profile with subsequent summation (see figure). Accuracy in determining profile losses from this formula is basically a function of the accuracy in calculating the parameters of the boundary layer in the plane of the trailing edges. Orig. art. has: 3 figures, 29 formulas.

SUB CODE: 13, 20 / SUBM DATE: 30Mar66/ ORIG REF: 006/ OTH REF: 002

Turbine Blade

Card 3/3

L 09215-67 EWP(m)/EWP(k)/EWT(l)/EWT(m)/EWA(w)/EWP(v) IJP(c) BM/PUR/WW/GG
ACC NR: AT6031304 (N) SOURCE CODE: UR/0000/66/000/000/0078/0087

AUTHOR: Mishchenko, V. M.

ORG: Kharkov Branch of the Institute of Mechanics AN UkrSSR (Khar'kovskiy filial Instituta mekhaniki AN UkrSSR)

TITLE: Flow around cascades of profiles with localized separation of the boundary layer

SOURCE: AN UkrSSR. Gidrodinamika gidromashin (Hydrodynamics of hydraulic machinery). Kiev, Izd-vo Naukova dumka, 1966, 78-87

TOPIC TAGS: turbine cascade, blade profile, fluid flow, aerodynamics

ABSTRACT: The author considers the velocity field behind a cascade for the case of nondetached flow and flow with localized separation of the boundary layer for a profile with a trailing edge having two thicknesses: $\bar{d}_e = d/b = 0.035$ and $\bar{d}_e = 0.070$. Shown in figure 1 is the aerodynamic wake for preseparation flow around the profile in the cascade. The boundaries of the wake are determined by constructing curves for the coefficient of profile losses ζ_i at various distances Δz from the cascade. The factor ζ_i is equal to the ratio between the total pressure loss to the kinetic energy of the

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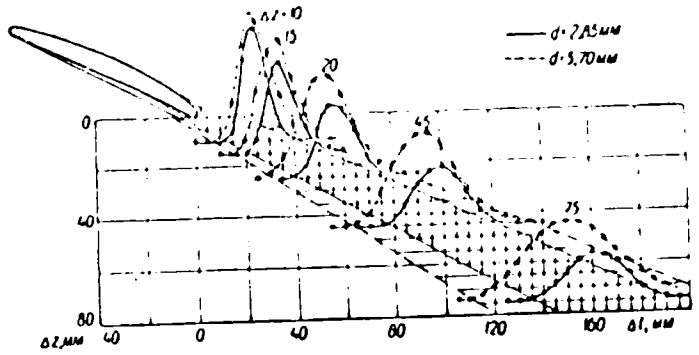
flow in front of the cascade. The results show that doubling the thickness of the trailing edges in the case of nondetached flow results in an increase in the aerodynamic wake by a factor of approximately 1.7. Nearly the same increase is observed in the coefficient a for variation in velocity behind the cascade in the plane joining the aerodynamic wakes calculated from the formula

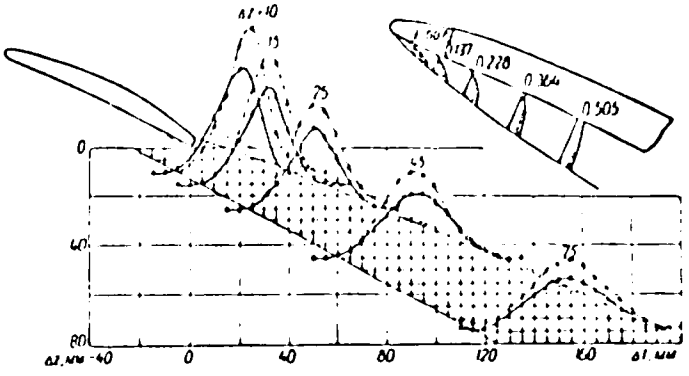


$$a = \frac{w_0 - w_{min}}{w_0},$$

where w_0 is the velocity in the main stream (outside the wake and at its boundary), w is the velocity in the wake and w_{min} is the minimum velocity in the wake. In the case of nondetached flow around the profile, an increase in the thickness of the trailing

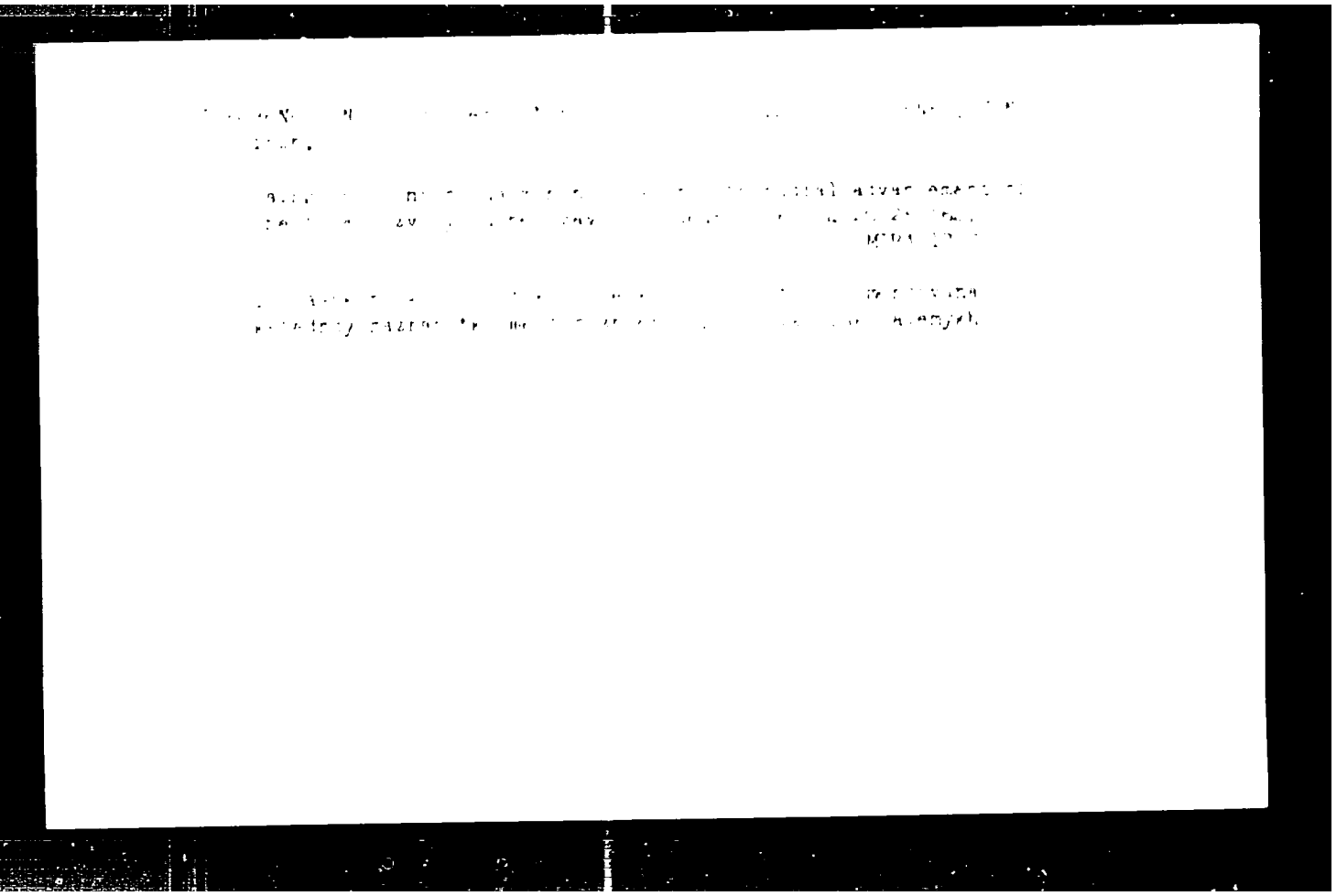
L 09245-67
ACC NR: AT6031304

edges resulted in an increase in profile losses by a factor of 2. Figure 2 shows velocity profiles in cross sections of the boundary layer in the region of localized separation as well as aerodynamic wakes behind the cascade. Experimental studies of the boundary layer showed that separation takes place at values of $\bar{x}=x/x_e$ between 0.10 and 0.15 inclusive, where x is the arc coordinate along the surface of the profile from the critical tip and x_e is the coordinate at the trailing edge. An analysis of experimental data shows that flow with localized separation of the boundary layer is accompanied by a slight reduction in profile energy losses when the trailing edge is thick. Formulas are given for an analytical solution of the problem on determining the velocity field. Orig. art. has: 5 figures, 15 formulas.



SUB CODE: 10,13,20 SUBM DATE: 30Mar66/ ORIG REF: 004

Card 3/3



PODMAT V, A.V., inzh.; MISHCHENKO, V.N., inzh.

Manufacture of iron graphite friction plates for the clutches of heavy power presses. Mashinostroenie no.3:5-6 My-Je '64. (MIRA 17:7)

1. Luganskiy teplovozostroitel'nyy zavod.
(Clutches (Machinery)) (Ceramic metals)

PANKRAT'YEV, Vasiliy Aleksandrovich; MISHCHENKO, V.N., red.

[Power feed for woodworking machinery; its introduction in Leningrad enterprises] Avtopodatchiki derevoobrabatyvaiushchikh stankov; opyt vnedreniia na leningradskikh predpriiatiiakh. Leningrad, 1963. 23 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Derevoobrabatyvaiushchaia promyshlennost', no.2) (MIRA 17:4)

MISHCHENKO, V.N., inzh.

Selection of the thickness of a membrane in determining rock pressure with electric deformation meters. Izv. vys. ucheb. zav.; gor. zhur. 5 no.1:121-123 '62. (MIRA 15:4)

1. Srednеaziatskiy politekhnicheskiy institut. Rekomendovana kafedroy razrabotki mestorozhdeniy poleznykh iskopayemykh Srednеaziatskogo politekhnicheskogo instituta.
(Rock pressure--Measurement)

MISHCHENKO, V.N., inzh.

Controlling rock pressure. Bezop.trudn v prom. 6 no.7 :23 Jl '62
(MIRA 15:7)

(Mining engineering—Safety measures)

L 08936-67 EWT(m)

ACC NR: AP6016050 SOURCE CODE: UR/0185/66/011/005/0563/0565

AUTHOR: Korzh, I. O.; Mishchenko, V. O.; Pravdyvyy, M. M.; Prykhod'ko, V. P.; Sklyar, M. T.; Tot[illegible]kyy, I. A. 50

ORG: Institute of Physics, AN UkrSSR, Kiev (Instytut fizyky AN UkrSSR)

TITLE: Measurement of angular distribution of neutrons with energies of [illegible], 0.5, and 0.8 Mev in elastic scattering on titanium and cobalt nuclei

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 5, 1966, 563-565

TOPIC TAGS: angular distribution, elastic scattering, neutron scattering, scattering cross section, titanium, cobalt, nuclear energy level, nuclear

ABSTRACT: These measurements were carried out because the available [illegible] distribution in elastic scattering of neutrons with energies of less than 1 Mev are inadequate for calculating the mean nuclear physical constants with sufficient accuracy. The measurement results are given in the accompanying table [illegible] it is seen that the data on the total cross section obtained by calculation are in good agreement with the experimental data (column 3) obtained by D. Hughes and J. Harvey (Neutron Cross Section, Second Edition, BNL-325, 1958). Orig. art. has: 2 formulas, 2 figures, and 1 table.

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L 08936-67

ACC NR: AP6016050

Element	Energy of neutron from photoneutron source E_n, Mev	Total cross section σt, barn	Total cross section σt, barn calculated	Elastic scattering cross section σe, barn	$\overline{\cos \theta}$	Transport cross section at elastic scattering σtre, barn
Ti	0.3	2.79	2.85	2.69±0.19	0.14±0.02	2.30±0.22
	0.5	2.42	2.72	2.57±0.10	0.17±0.01	2.12±0.12
Co	0.5	4.48		4.77±0.24	0.13±0.01	4.14±0.27
	0.8	3.42	3.54	3.73±0.26	0.21±0.03	2.94±0.32

Card 2/2 SUB CODE: 20/ SUBM DATE: 12Jan66/ ORIG REF: 003/ OTH REF: 004

SMIRNOV, G.M.; IVANOV, A.A.; BOCHAROV, V.A., KOSTYUCHENKO, N.T.,
MEDYNSKIY, A.F.; MISHCHENKO, V.P., TANCHIK, Ye.M.

Welded ladle for pouring steel. Met. i gornod. prom. no. 2
65 Mr-Ap '64. MIRA 17:6

MISHCHENKO, V. P.

USSR/Electricity - Magnetic Amplifiers Mar 53

"Curves of Simultaneous Magnetization by Ac and Dc Fields," I. B. Negnevitskiy, Cand Tech Sci; Engr I. K. Panina; and Engr V. P. Mishchenko; Moscow

Elektrichestvo, No 3, pp 63-64

Presents curves of simultaneous magnetization of permalloy and E4A steel for moderate values of ac component of magnetizing intensity on 400-cycle supply (necessary when calcg magnetic amplifiers with feedback) and curves of resultant induction as functions of dc magnetizing force and ac component of induction (necessary when calcg transient processes in magnetic amplifiers). Submitted 8 Aug 52.

PA 254T42

AUTHOR: Mishchenko, V.P., Engineer

TITLE: Comments on A.S. Ayukov's Paper "Burden Distributor of a New Design" (Otklik na stat'yu A.S. Ayukova "Raspredelitel' shikhty novoy konstruktsii")

PERIODICAL: Stal', 1958, No.1, pp. 22 - 23 (USSR).

ABSTRACT: The original paper was published in Stal', 1957, No.11. The present author disagrees with some views expressed in the paper. He outlines some methods tried on the Azovstal' Works to compensate for non-uniform distribution of materials in the distributor of the furnace charging equipment which did not give any positive results. In his view, increasing the speed of rotation of the distributor would produce more positive results.

ASSOCIATION: Azovstal' Works (Zavod "Azovstal'")

AVAILABLE: Library of Congress

Card 1/1

MISHCHENKO, V.P.

Automatic control of conveyer lines in gas and dust hazardous mines. Ugol' Ukr. 4 no.12:29-31 D '60. (MIRA 13:12)

1. Zam. glavnogo inzhenera shakhtoupravleniya No.4/21 tresta Stalinugol'.

(Automatic control)
(Conveying machinery)

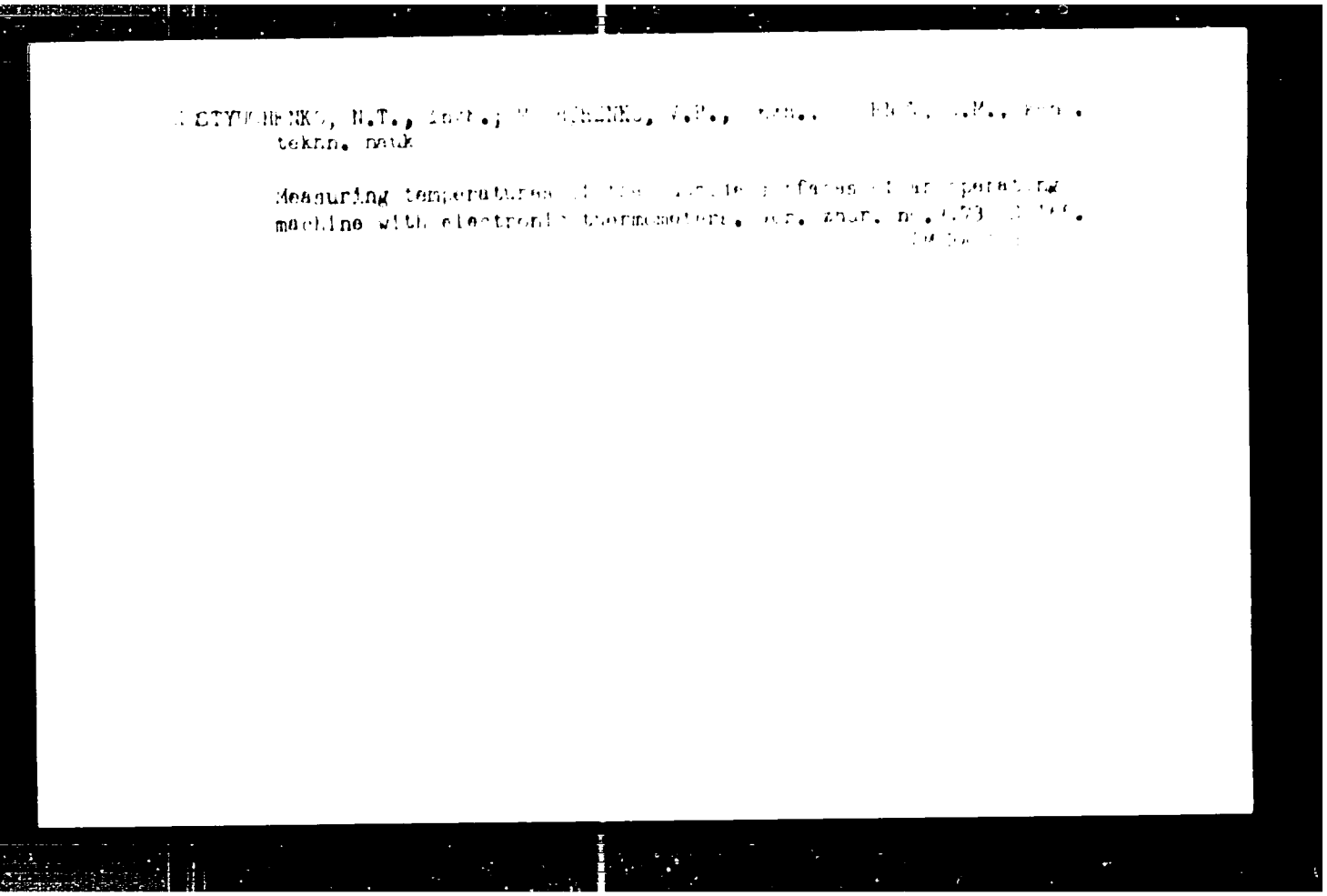
MISHCHENKO, V.P., inzh.

Signaling while enlarging mine shafts. Bezop.truda v prom. 4 no.12:30-31 D '60. (MIRA 14:1)

1. Shakhtoupravleniye No. 4/21 tresta Stalinugol'.
(Coal mines and mining—Safety measures)

MISHCHENKO, V.P., gornyy inzhener

Alarm signaling system notifying the jamming of cars on inclines.
Ugol' Ukr. 5 no.11:35-36 N '61. (MIRA 14:11)
(Mine railroads--Rail)



SMIRNOV, G.F., kand.tekhn.nauk; IVANOV, A.A., kand.tekhn.nauk; VAN[illegible], V.[illegible], inzh.; MICHURSKIY, V.[illegible], inzh.; KOZYRCHENKO, M.[illegible], inzh.; [illegible]SA, I.G., inzh.

Measuring external surface temperatures of a large-capacity converter and converter ladle. Stal' 25 no.5:476 My '65.

IVANOV, A.A.; [illegible], P.S.; [illegible], A.M.; [illegible], V.A.; [illegible], N.T.; IYUDIN, Z.A.; [illegible], A.F.; [illegible], V.I.; FURSA, I.S.

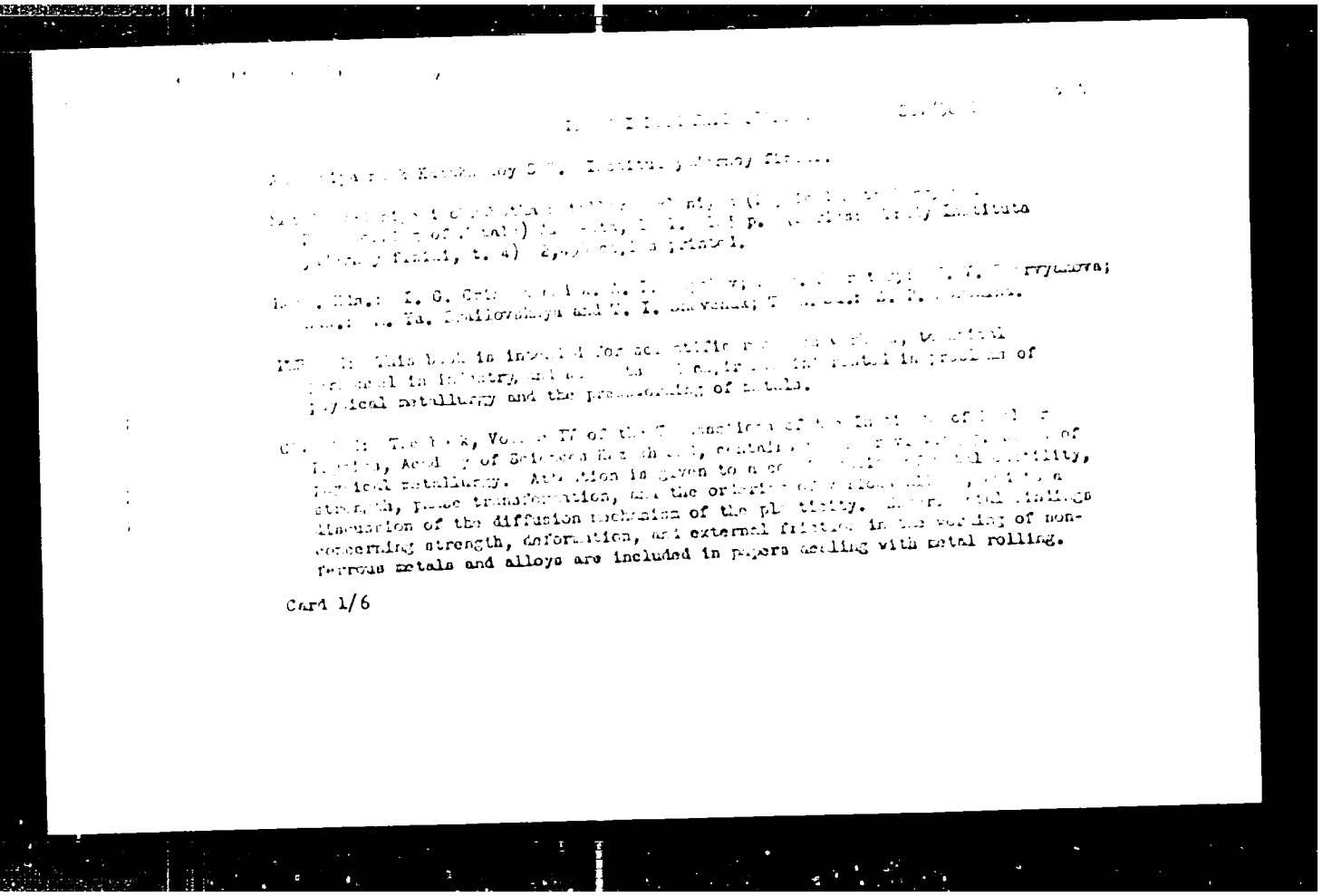
Investigating [illegible] steel-pouring ladles. Izv.vys.ucheb.zav.; chern. met. 8 no.4: [illegible] '65. (MIRA 18:4)

1. Zhdanovskiy metallurgicheskiy institut.

LYUBLINSKIY, A.I.; ROMANOVSKIY, L.B.; KOREN, L.N.; MISHCHENKO, V.S.; FROLOVA, A.I.; KOTIK, P.L.; KHIL'KO, M.M.; MOLCHANOVA, M.I.; VINOGRADOV, N.M.; PYLAYEV, S.V.; BEYGUL, Ye.I.; ROKHLIN, V.A.; MASYUKOV, N.T.; BONDAR', V.I.

In the country's steelmaking plants. Metallurg 9 no.9: 16-19 S '64. (MIRA 17:10)

1. Saldinskiy metallurgicheskiy zavod (for Pylayev).
2. Zavod im. Dzerzhinskogo (for Beygul, Rokhlin).
3. Yenakiyevskiy metallurgicheskiy zavod (for Masyukov, Bondar').



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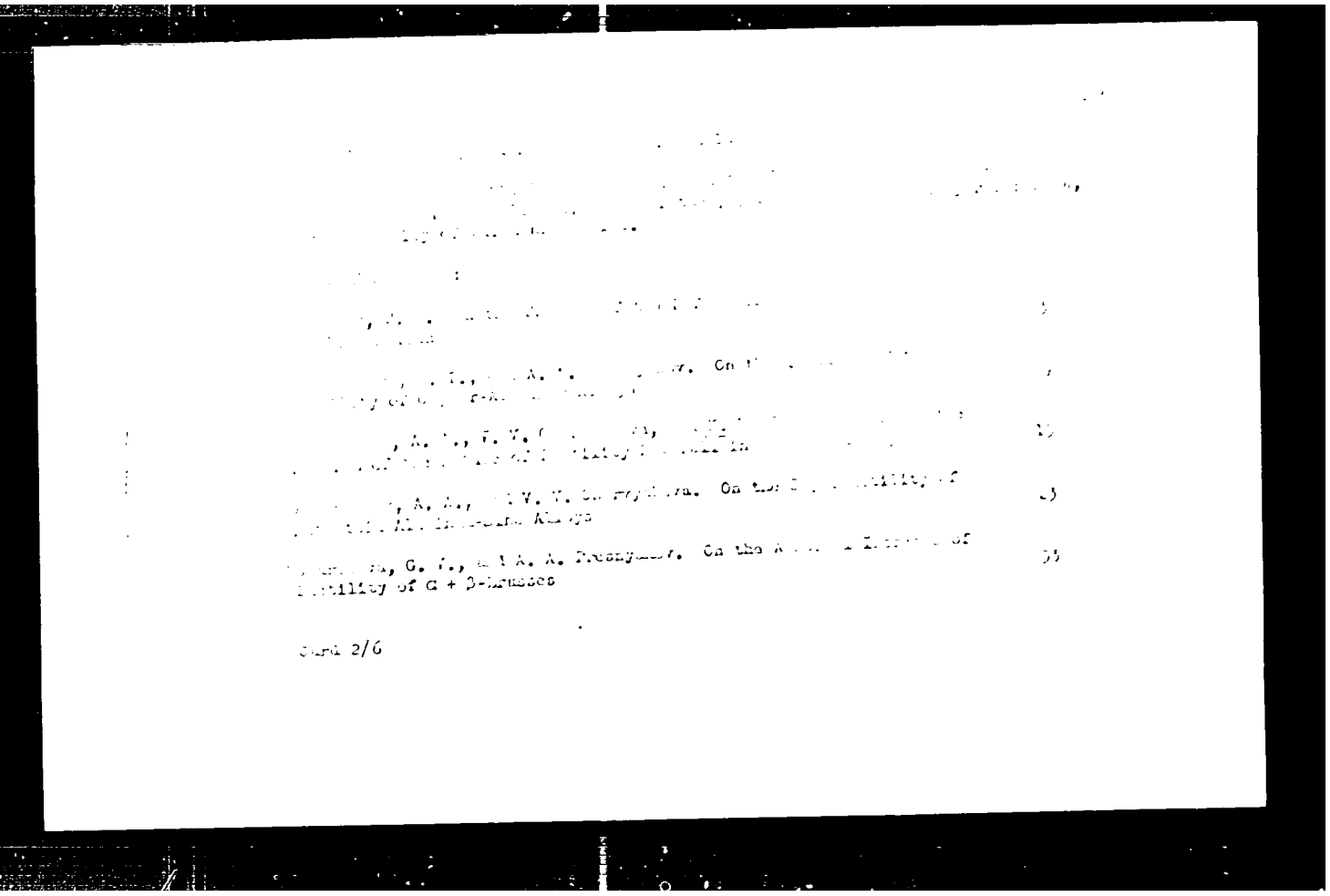


Card 2/6

[illegible], G. V., and A. A. [illegible]

[illegible], A. A., and L. I. [illegible]

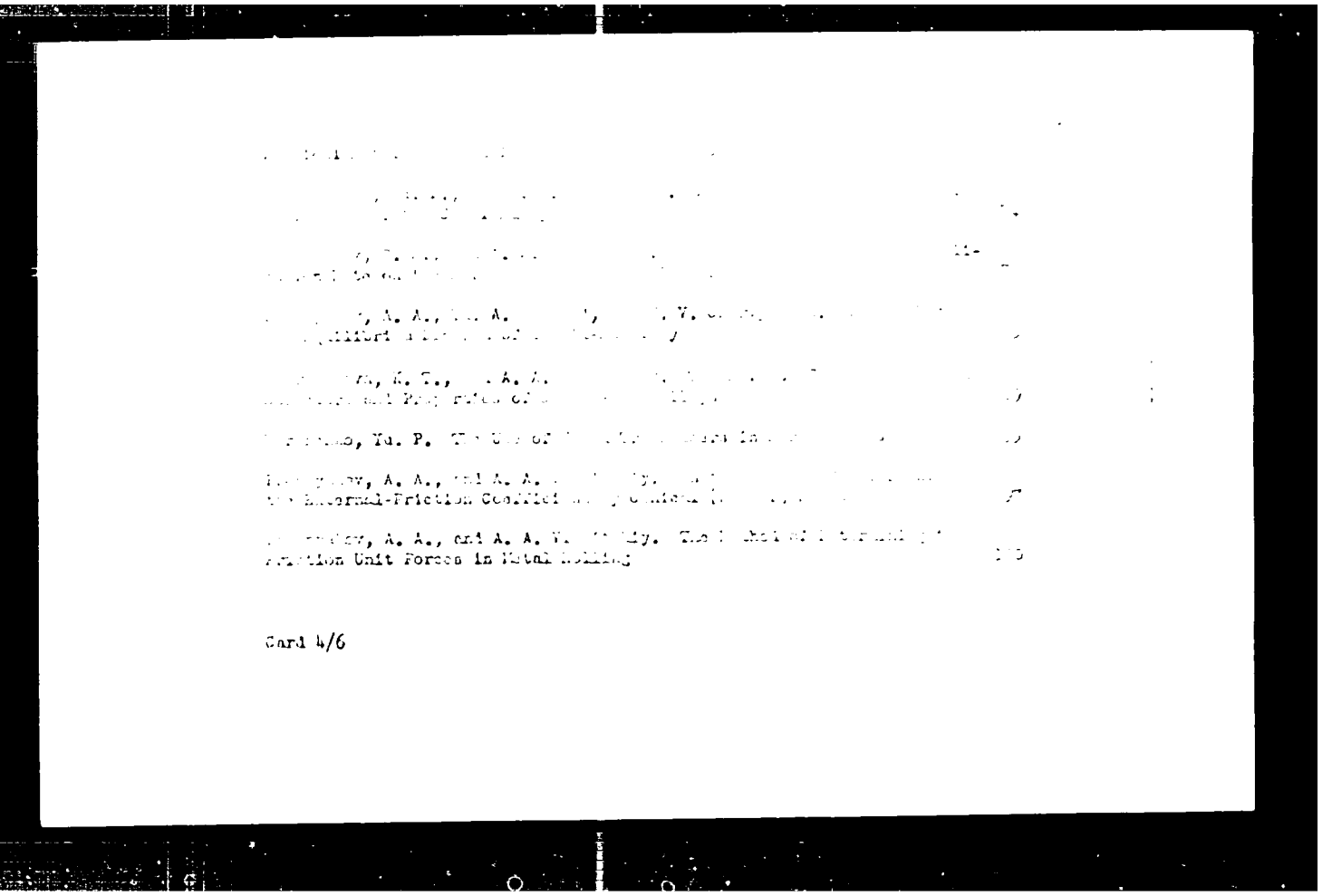
[illegible], A. A., and L. I. [illegible]
[illegible] and Alloys

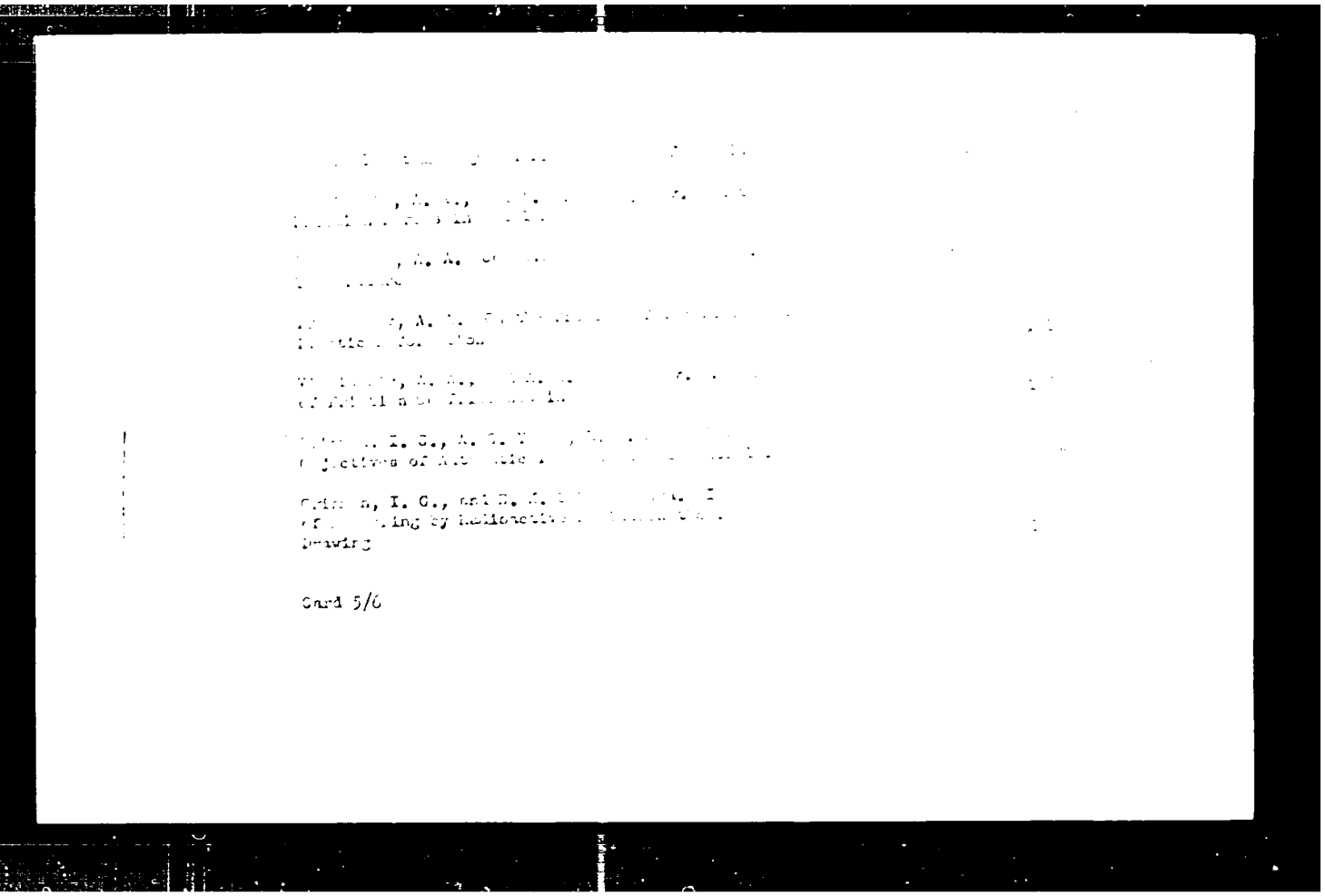
[illegible], A. A. On the [illegible]
[illegible] and Alloys

[illegible], A. A., L. I. [illegible]
[illegible] of the [illegible]
Structure of Lead

[illegible], A. A., L. I. [illegible]
in the Electrical Resistance of [illegible]

Card 3/ 6





Card 5/6

AVAILABLE: Library of Congress

Card 6/6

[illegible]
12-[illegible]-61

S/263/62/000/011/002/022
I007/I207

AUTHOR Grinman, I. G., Ovsov, Yu. V., Mishchenko, V.S. and Bakhayev, Sh.

TITLE Photoelectric micrometer for measuring the diameter (gage) of moving wire or threads

PERIODICAL Referativnyy zhurnal, otdel'nyy vypusk 32, Izmeritel'naya tekhnika, no. 11, 1962, 13, abstract 32 I1 80. ("Tr. In-ta yadern. fiz. AN KazSSR", no. 4, 1961, 138-146)

TEXT Contactless devices of the shadow, pulse, pneumatic and induction type for measuring wire diameters during drawing are described, and shortcomings when used under plant conditions are revealed. Attention is drawn to a new improved measuring device — the photoelectric micrometer designed at the Institut Yadernoy fiziki AN KazSSR (Institute for Nuclear Physics of the AS. KazSSR). This micrometer consists of a combined optical-mechanical projection system with an electronic follow-up device. The image of the wire, illuminated by a light beam, is focused on a screen provided with slots that are located parallel to the image in the center of the upper (top) and lower edges of the screen. Two photomultipliers, mounted behind the screen receive light pulses that pass through the slots and transform them into voltage pulses. The actual result of measurements is determined from the coincidence of the pulse front-lines. Detailed description is given of the electronic circuit specially designed for this device. Results of laboratory tests of the new micrometer are reported. There are 5 figures and 3 references.

[Abstracter's note: Complete translation.]

Card 1/1

ZHALNIN, V.A. (Voronezh); IVLEV, D.D. (Voronezh); MISHCHENKO, V.S. (Voronezh)

Insertion of an annular stamp into a half-space. PMTF no.6:153-154 N-D '61. (MIRA 14:12)

(Deformations(Mechanics))
(Plasticity)

MISHCHENKO, V.S.

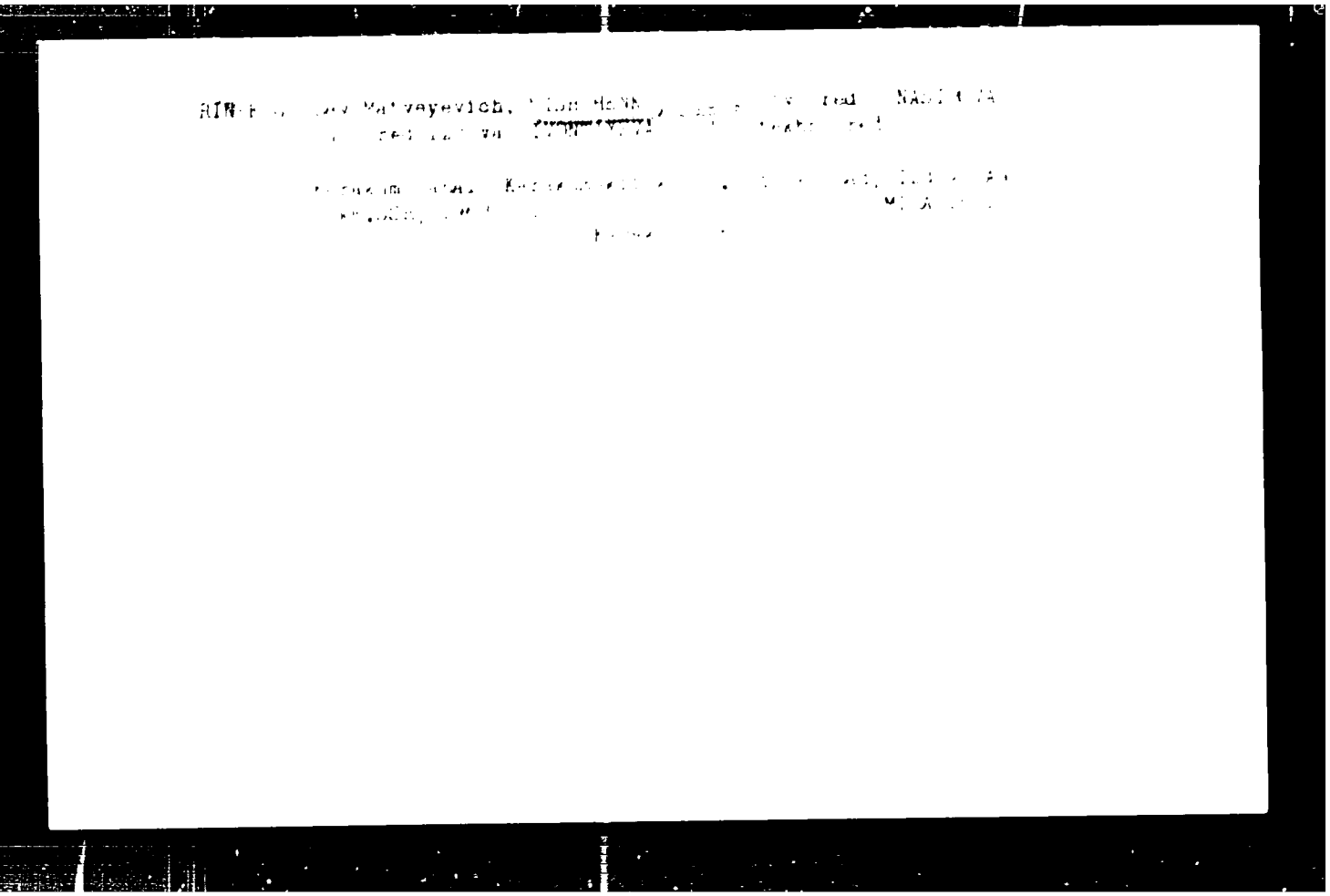
Genetic association of complex metal, rare metal, and phosphorus mineralization with an effusive-intrusive complex of the Karadokskii stage (northeastern part of central Kazakhstan). Izv.vys.uchebzav.; geol.i razv. 5 no.8:98-106 Ag '62. (MIRA 15:11)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.
(Kazakhstan--Ore deposits)

ZAIKA-NOVATSKIY, V.S.; MISHCHENKO, V.S.

Age of the Bogdanovka magmatic complex (northern Kazakhstan)
Sov.geol. 5 no.12:132-133 D '62. (MIRA 16:2)

1. Kiyevskiy gosudarstvennyy universitet.
(Atansor Lake region--Rocks, Igneous)



MISHCHENKO, V.S.

Role of substitution processes in the formation of granitoid massifs. Geol. zhur. 24 no.4:50-61 '64. (MIRA 18:2)

1. Institut geologicheskikh nauk AN UkrSSR.

MISHCHENKO, V.S.

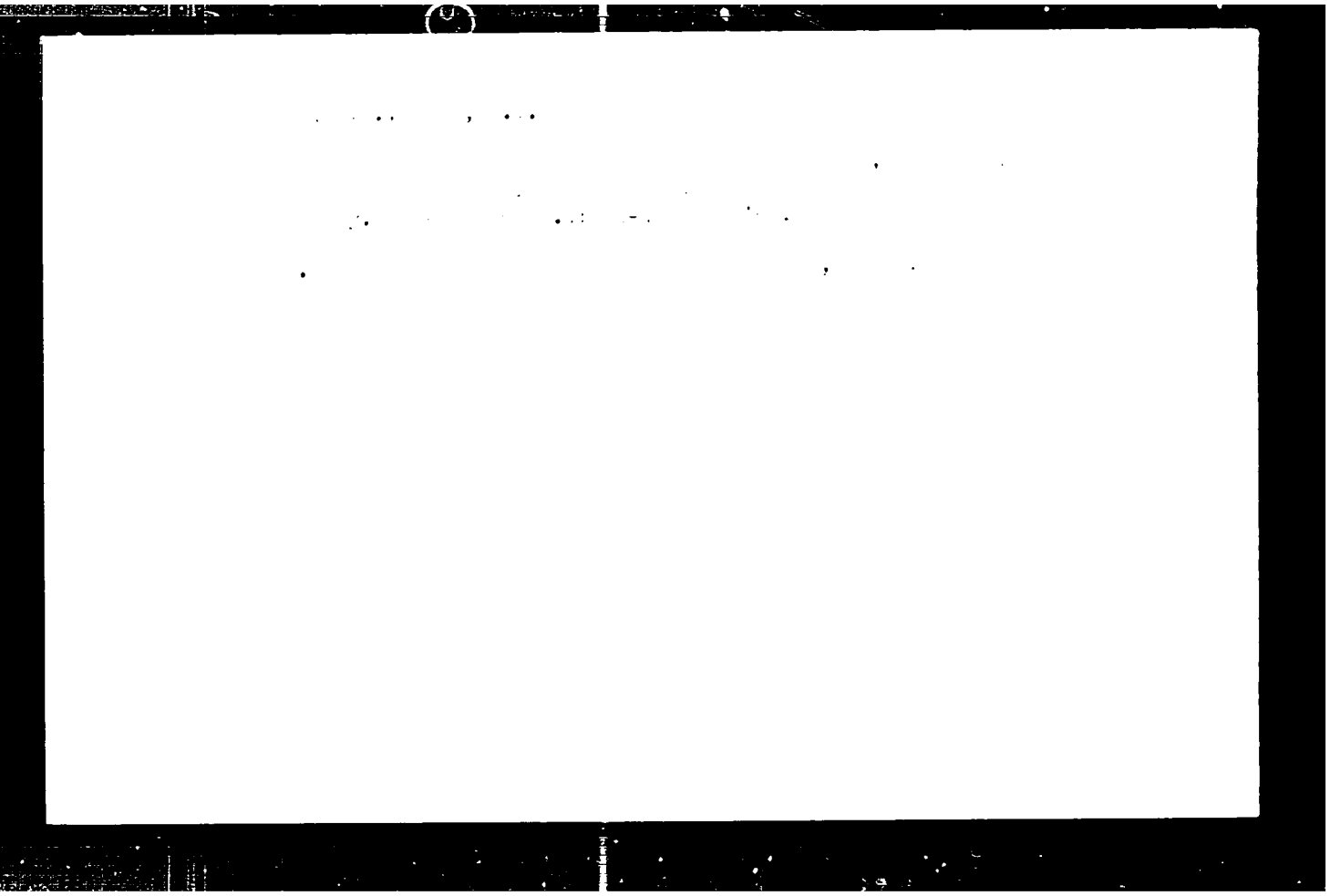
Experimental mathematical study of the problem concerning the optimum area of grain-hold sampling during the study of their accessory minerals. Geokhimiia no.2:227-240 F '65.

(MIRA 18:6)

1. Institut geologicheskikh nauk AN UkrSSR, Kiyev.

MISHCHENKO, V.S.

Conference on mathematical methods in geology. Geol. zhur. 24 no.5:111-113 '64. (MIRA 17:12)



ZAIKA-NOVATSKIY, V.S.; NISHCHENKO, V.S.

New data on the age of the Krykliudukskiy intrusive complex.
Sbor.nauch.rab.Kiev.un. no.1:8-12 '63.
(MIRA 18:11)

VINOGRADOV, O.F.; MISHCHENKO, V.S.

Massif of the secondary quartzites of Mount Mayutas.
Sbor.nauch.rab.Kiev.un. no.1:26-34 '63.
(MIRA 18:11)

MISHCHENKO, V.S.

Frequency of errors in approximate methods of spectral analysis. Zav.lab. 31 no.3:[illegible] 65.

(MIRA 18:4)

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